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## ANALYSIS

# Better value primary care is needed now more than ever

Effective primary care is essential to deliver high value care, but change needs to be driven by evidence based policy and investment, argue **Jessica Watson and colleagues**

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Healthcare systems globally are facing multiple challenges, with ageing populations, increasing chronic disease, rising multimorbidity, and innovative treatments and technologies all leading to rising costs. With finite resources, and an increasing recognition of the potential harms to patients of overdiagnosis and overtreatment,<sup>1</sup> it is essential that resources are used optimally. We explore how the value based healthcare framework<sup>2</sup> can help decisions about how to allocate resources, and the importance of good evidence not only for patient treatment but for the organisation of health services.<sup>2,3</sup>

## What do we mean by value in healthcare?

For the past 20 years most of the focus in healthcare has been on quality, safety, efficiency, and cost effectiveness. However, it is increasingly clear that these four factors alone are not sufficient for the 21st century. Care that is apparently high quality, safe, efficient, and cost effective in other circumstances, will decrease value when delivered to the wrong patient at the wrong time. Optimality—defined by Donabedian as “balancing of improvements in health against the cost of such improvement”—is important.<sup>4</sup>

As healthcare resources are increased the benefits initially increase but then flatten off (fig 1⇓). By contrast, the amount of harm done increases in direct proportion to the investment of resources. Consequently, the net benefit rises with increasing investment until a point of optimality, after which it falls off. It is at this point that high value care is achieved. For example, population level reductions in risk factors for cardiovascular disease have led to large improvements in cardiovascular mortality.<sup>5</sup> However expanding indications for treatment to include low risk people with mild hypertension takes us beyond the point of optimality; here evidence of benefit is limited and side effects can cause harms.<sup>6</sup>

To achieve value in healthcare optimality must be considered at the level of the individual (personal value), organisation (technical value), and population (allocative value). Balancing allocation to ensure individual and population needs are met within finite resources is often challenging. For example, drug treatments for hypertension may deliver a large benefit (eg, avoiding stroke) for a small number of people, but the harms (eg, side effects), though relatively small, will affect a very large number of people. Optimality therefore requires evidence and shared decision making with individual patients.

## Why is value in healthcare important?

Atlases of variation in health and healthcare show substantial differences in costs, outcome, and quality. For example, in 2013 there was a 57-fold variation between English primary care trusts in general practitioners' use of thyroid function tests and 106-fold variation in the use of serum creatinine tests.<sup>7</sup> This unwarranted variation is likely to reflect both overuse and underuse of healthcare.

Too much medicine, even when the quality is high, can harm patients.<sup>1</sup> Examples include aggressive treatment to reduce glycated haemoglobin concentrations increasing morbidity and mortality in elderly people with diabetes,<sup>8</sup> and routine screening for dementia, which risks false positive diagnoses and has no proved benefit.<sup>9</sup> Underuse or lack of access to high value healthcare services can harm both individuals and populations by increasing socioeconomic inequalities in health. For example, pulmonary rehabilitation has been shown to improve the health of people with chronic obstructive pulmonary disease (COPD) but people living in more deprived areas who enrol in pulmonary rehabilitation are less likely to complete it than those living in less deprived areas.<sup>10</sup>

Tackling wasteful spending in healthcare has emerged as a priority for governments worldwide.<sup>11</sup> Around one fifth of health expenditure has been estimated to make no or minimal contribution to health outcomes, and health systems will be unable to cope with the rises in rates of long term conditions and multimorbidity<sup>12</sup> if value is not optimised. Various initiatives have been developed in response to this challenge such as RightCare,<sup>13</sup> Getting it Right First Time,<sup>14</sup> Choosing Wisely<sup>15</sup> and minimally disruptive medicine.<sup>16</sup> Value based medicine brings together these concepts within an overarching framework.

## Primary care is essential for delivering value

Optimising primary care is vital to achieve value in healthcare. In the UK 90% of NHS patient contacts occur in primary care, which acts as a filter to specialist services. Only 5% of general practice attendances result in referral to another service.<sup>17</sup> Starfield and colleagues studied the association between the provision of high quality primary care and a country's health outcomes and found strong primary care is associated with improved patient outcomes, reduced health inequalities, and improved cost effectiveness.<sup>18</sup> More recent analysis concluded that although countries with comprehensive primary care systems tend to have better outcomes at higher cost, when primary care doctors act as gate keepers to specialists and patients are registered with a primary care doctor (as in the NHS) health spending is lower.<sup>19</sup>

Primary care excels at high value preventive care, can lead to decreased disease burden and downstream treatment costs, and may modify demand in the long term. However, primary care in England is buckling under increasing demands, with clinical workload for general practice rising by 16% in seven years.<sup>20</sup> Little progress has been made to meet the promise of 5000 extra GPs by 2020, and the number of full time GPs in England actually fell in 2016.<sup>21</sup> Pressure on GPs may be partly mitigated by the increasing numbers of allied health professionals, but if primary care is not strengthened, secondary care could face even greater burdens. As Roland and Everington stated: "If general practice fails, the whole NHS fails."<sup>22</sup>

## Maximising value in primary care

The government response to rising healthcare demands always seems to be to ask primary care to do more. GPs have been asked to do more seven day working, more to take pressure off emergency departments, more to tackle obesity, and more screening for dementia, to name just a few recent examples. But if we are to achieve high value primary care, each additional demand must be weighed up against the opportunity cost. We need to focus on what low value activities primary care should be doing less of.

Table 1⇓ gives some opportunities to increase value in primary care at the individual, organisational, and population level. Many of these examples, such as reducing unnecessary blood tests, are important not just in primary care but across all health services.

## How could current changes in primary care increase (or decrease) value

Primary care in the UK is changing rapidly in response to the pressures described. Many struggling practices are closing or merging with other practices, larger practice networks are growing, and integrated models of care linking community and

hospital services are developing. By sharing ideas and good practice—for example, through the Royal College of General Practitioners' Bright Ideas forum<sup>43</sup>—we have an opportunity to rethink or redesign primary care to provide optimal value healthcare for individuals, organisations, and society.

New models of care such as accountable care systems and sustainability and transformation partnerships mean that primary care can influence value throughout the entire health and care system. Evaluation of the National Association for Primary Care's primary care homes, which integrate primary, secondary, and social care, shows that they have stimulated new ways of working in areas such as care of elderly people, although data on patient outcomes are still limited.<sup>36</sup>

The challenge is to design new organisational forms and care processes that decrease waste and demedicalise care whenever possible. These new models of care must be evidence based and balance benefits against opportunity costs. Some of the recent demands on primary care have not done this. For example, moving towards improving access through seven day working and larger group practices seems laudable, but evidence that better access leads to improved health outcomes is lacking.<sup>44</sup> Furthermore, this could have knock-on effects on continuity of care, which is not only highly valued by patients and general practitioners but is also associated with improved patient outcomes.<sup>45</sup> Elderly people who see the same general practitioner have fewer hospital admissions,<sup>23 41</sup> and the rise in hospital admissions in recent years is due almost entirely to patients who had accessed emergency departments directly, without going through their general practitioner.<sup>46</sup> We therefore need a public debate about the relative importance of convenient timely access versus continuity of care. Making a change that is not underpinned by a clear rationale and evidence is wasteful.

## Effective change

Fundamental questions about how to organise and deliver primary healthcare require better evidence to guide decisions. Primary care measurement systems need to be developed to generate data that can assist with the identification of optimality. Innovative examples include OpenPrescribing.net, which allows GP prescribing rates to be compared at a regional and practice level. Data on rates of consultation, diagnostic testing, referral, and patient outcomes could help identify outliers, explore trends, and measure the impact of policy interventions.

The era of evidence based medicine has changed the way medicine is practised; now it is time for politicians to follow suit with an era of evidence based policy. This means policy interventions should be trialled or piloted before implementation and evidence of benefits must be weighed against the opportunity costs and potential harms.

We must also remember that change itself requires adequate investment of time and money. Many primary care organisations are introducing new multiprofessional roles or bringing in physician assistants, extended scope specialists (eg, physiotherapists and pharmacists), and mental health workers. These new roles and relationships may take years to reach full potential and require substantial input from senior practice staff.<sup>47</sup> Extra resources will therefore be needed initially and staff retention is crucial to allow the benefits of these new roles to be realised.

Finally, although it is important to maximise value through decisions about how resources are used, this is inextricably linked to the total resources made available, which is ultimately a political choice. The proportion of gross domestic product spent on healthcare is reducing in the UK compared with other

developed countries, and increasing value can only partially mitigate the effects. Given limited resource and unending demand we also need a wider dialogue and debate with citizens (box 1) and professionals about what we want from the NHS and what we choose to afford.

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**Box 1: A citizen's perspectives**

Yes, better value for money must always be worthwhile. But isn't the NHS more efficient than most of the competition and aren't we spending less on health as a percentage of GDP than most other countries in Europe?

As a (hopefully) healthy retiree, I celebrate, not bewail, the fact that people live longer lives; solutions to problems generally create new problems. Richer countries always spend more on health services and other services. It's a sign of wealth.

If the wealthy paid tax as reliably as they used to, and at rates in effect during the post-war economic boom, then we would more easily afford the NHS now, just as we afforded it then. Healthcare was seen as a marvellous new universal benefit, not a burden.

Vast inequality makes us all ill, insecure, and miserable (in different ways), and it undermines the NHS because the super-rich opt out of socialised healthcare, spending more on health than may be optimal for them or affordable for society as a whole

Yes, look at value for money in treatment options, private finance initiatives, public-private partnerships, and whatever comes next. Look at charges in pharmaceuticals and equipment. Look at, and renegotiate, legacy costs. Have the endless reorganisations of healthcare administration provided value for money? If each was so successful, why was each so soon replaced by the next?

Incentives matter, and they differ. The private sector investor's incentive is to maximise financial returns. That's why their dealings need to be seen and supervised by others and subject to public gaze and assessment. What about patient incentives? A sick person may be relieved that more can be spent on their health than they could personally afford to insure against. Can patients be expected to look at their own trauma from a wider perspective? Can specialists be expected to see the costs and benefits of their specialism from a wider perspective?

GPs and public healthcare managers, perhaps uniquely, have a broader brief, charged with the need to optimise quality and cost of healthcare. They may also prefer a quiet life in the face of local pressures or vested interests. Conversely, senior managers may reorganise the boat too much, just to prove they made a mark.

Alex Howard is a retired tutor, manager, and writer. He is a lay member of a medical research ethics committee and chaired a local community health council in the 1980s.

**Key messages**

Value based healthcare involves balancing improvements in health against the cost of such improvement

Current changes in UK primary care offer opportunities to increase value at the individual, organisational, and population level

Change requires adequate investment and better evidence to guide decisions

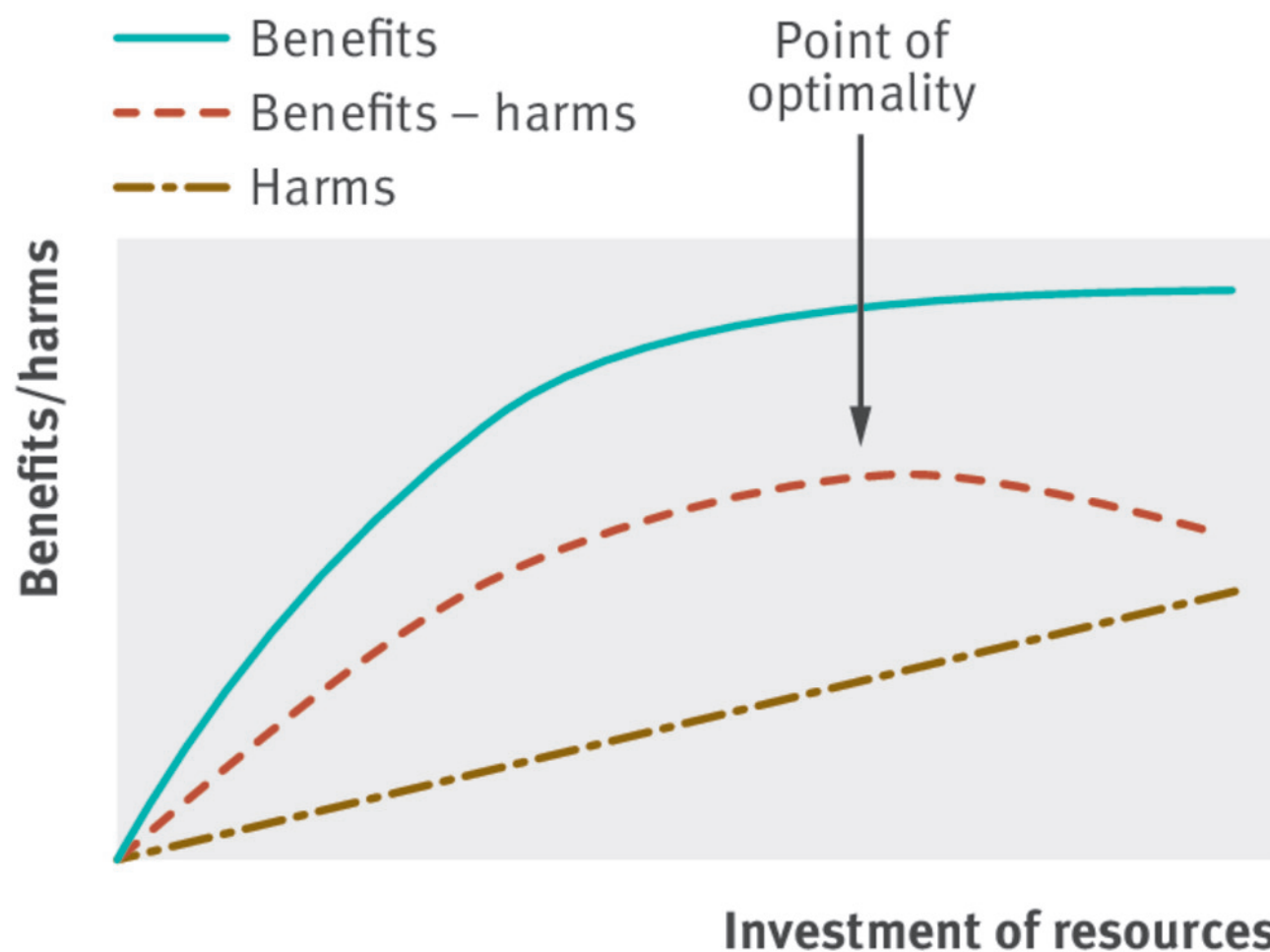
Primary care should consider what low value activities to do less of as well as what to do more of

**Table****Table 1 | Examples of opportunities to improve value in primary care based on personal, technical, and allocative value**

Things to do more of	Things to do less of
<b>Personal value (individual)</b>	
<i>Continuity of care</i> —Associated with improved patient outcomes and lower rates of hospital admission. <sup>23 24</sup> May require pairing of GPs and shared patients given an increasingly part-time workforce	<i>Tests not influencing management</i> —Tests are often performed for “reassurance,” yet systematic reviews have shown normal results do not reassure patients <sup>25</sup>
<i>Social prescribing (community referral)</i> —Means of enabling primary care professionals to refer people to local, non-clinical services. It may improve anxiety and could reduce the use of NHS services, although evidence is limited <sup>26</sup>	<i>Polypharmacy</i> —By reducing opioid use, for example. Long acting opioids are associated with a significantly higher risk of all cause mortality and are often addictive and ineffective for chronic pain <sup>26 27</sup>
<i>Patient self care</i> —Self monitoring and management of long term conditions may improve health outcomes, improve experience, and reduce costs <sup>30</sup>	<i>Low value risk modification, particularly for patients with multimorbidity</i> —Guidelines on single health conditions may not be applicable and aggressive management of risk factors may be an inappropriate treatment burden <sup>29</sup>
<i>Shared decision making and “what matters to you” medicine</i> —Sharing the benefits and harms of preventive treatment may reduce prescribing; less than a third of patients would take a drug if they thought they had a 5% chance or less of benefiting <sup>33</sup>	<i>Health checks</i> —Benefits of health checks have not been demonstrated <sup>31</sup> and there is concern that they may overmedicalise the “worried well” and increase health inequalities <sup>32</sup>
<b>Technical value (organisational)</b>	
<i>Information enabled peer review to curb variability within larger primary care organisations</i> —Examples include Clinical Guardian, an electronic platform for routine clinical audit of GP out-of-hours clinicians <sup>34</sup>	<i>Unnecessary appointments</i> —For example, checking blood pressure. Home readings and phone consultations may be appropriate instead
<i>Integration between primary, secondary care, and social care</i> —Examples include primary care homes, which provide population based care using an integrated workforce on a larger scale than the traditional practice size. Early evidence shows these improve interprofessional working, though data to track progress against defined metrics are needed to measure outcomes <sup>36</sup>	<i>Administrative workload for clinicians</i> —Appropriate delegation of tasks to administrative staff can reduce GP time spent on correspondence <sup>35</sup>
	<i>Non-evidence based technology “solutions”</i> —Although technology may improve patient care and reduce pressure on health services, particularly for long term conditions, many apps and devices have not been evaluated and may have harms or could increase demand. <sup>37</sup> For example, increased investment of resources into telehealth for COPD has been shown to increase primary care workload with no demonstrable benefit <sup>38</sup>
<b>Allocative value (population)</b>	
<i>Increased allocation of NHS funding into general practice</i> —The cost of a hospital stay is estimated at £400/day <sup>39</sup> whereas an average general practice receives £142 per patient a year. <sup>40</sup> Increasing general practice funding to	<i>Supplier induced demand resulting from broadening routes of access</i> —Additional NHS services, such as walk in centres, minor injury units, and 111 services, are often not substitutive and tend to increase overall service use <sup>42</sup>

Table 1 (continued)

Things to do more of	Things to do less of
increase capacity to keep patients out of hospital could increase value—for example, improving continuity of care has been shown to reduce hospital admissions <sup>41</sup>	<i>Reorganisations of healthcare</i> —These incur costs, both financial and in terms of patient confusion and staff morale
<i>Allocating more pharmacists and extended scope physiotherapists to primary care to create additional capacity and multiprofessional skill mix</i>	

**Figure****Fig 1** Relation between increasing resources and increasing benefits and harms, showing Donabedian's point of Optimality<sup>4</sup>